

REMARKS

Initially, the undersigned wishes to acknowledge the Examiner's courtesy in providing the telephonic interview of January 3, 2006. The substance of the interview is discussed below where appropriate.

By this Amendment, Applicants amend claims 1, 8, 10, 11, and 27-30 and add new claims 36-38. With claims 7 and 26 having been previously canceled, claims 1-6, 8-25, and 27-38 are therefore pending in this application. In the final Office Action of January 4, 2006 (Office Action),¹ claims 30 and 31 were allowed and claims 1-6, 8-25, 27-29 and 32-35 were rejected under 35 U.S.C. § 102(e) as anticipated by U.S. Patent No. 6,728,603 ("*Pruzan*").² Applicants acknowledge with appreciation the indication of allowable subject matter and address the rejection, as well as the new claims, below.

Section 102(e) rejection of claims 1-6, 8-25, 27-29, and 32-35

Applicants request withdrawal of the § 102(e) rejection of claims 1-6, 8-25, 27-29 and 32-35 because *Pruzan* fails to anticipate these claims. In order to properly anticipate Applicants' claimed invention under § 102, a single prior art reference must disclose each and every element of the claim at issue, either expressly or under principles of inherency. Further, "[t]he identical invention must be shown in as complete detail as is contained in the . . . claim." *See* M.P.E.P. § 2131. Also, "[t]he elements must be arranged as required by the claim." *Id.*

¹ The Office Action contains a number of statements reflecting characterizations of the related art and the claims. Regardless of whether or not any such statement is identified herein, Applicants decline to automatically subscribe to any statement or characterization in the Office Action.

² The Office Action states (page 2) that "[c]laims 1 through 29, and 32-35 are rejected under 35 U.S.C. 102(e)." Because claims 7 and 26 were canceled in the Amendment filed July 18, 2005, however, Applicants do not address these claims in this paper and assume the § 102(e) rejection applies only to pending claims 1-6, 8-25, 27-29, and 32-35.

With regard to independent claim 1, *Pruzan* fails to disclose at least “routing, based on the destination address and an address map including proxy logic identifiers, the first message to a proxy logic element in the gateway that performs functions associated with the destination module based on data included in the first message,” as claimed. *Pruzan* is directed to managing wireless vehicular communications. Abstract. *Pruzan*’s discloses a “vehicle 20,” a “protocol converter 30,” and a “diagnostic system 40.” Col. 3, lines 30-33, Fig. 1. The vehicle includes various controllers (22) connected to a bus (24). Col. 3, lines 33-37, Fig. 1. According to *Pruzan*, the protocol converter “allows the diagnostic system 40 to ‘listen’ to messages on bus 24, send messages to the controllers 22, and/or receive messages from the controllers 22.” Col. 3, lines 60-63. In addition, as noted by the Examiner, the protocol converter includes a “computer 70” that “may be operable to emulate the functions of a node on bus 24.” Office Action at pp. 2, 4 (citing *Pruzan*, col. 9, lines 1-22).

Contrary to the Examiner’s position, *Pruzan*’s disclosure regarding node emulation does not teach the “routing” feature recited in claim 1. As discussed in the interview, the mere mention of emulating a node does not teach routing a message to a proxy logic element based on an address map, let alone “routing, based on the destination address and proxy logic identifiers in an address map, the first message to a proxy logic element in the gateway that performs functions associated with the destination module based on data included in the first message,” as claimed. As discussed, *Pruzan* does not disclose that the emulating performed by computer 70 involves routing a message to a proxy logic element in computer 70.

Pruzan discloses, as an example of node emulation, that the computer 70 “may be able to perform dynamic address configuration, in which it negotiates and claims an address on bus 24 on behalf of diagnostic system 40” and “may be able to respond to state and health inquiries

from the other devices in the bus.” Col. 9, lines 1-22. As discussed in the interview, this disclosure does not teach the “routing” feature of claim 1. Claiming an address on behalf of system and responding to inquiries from other devices, as disclosed by *Pruzan*, does not constitute routing a message to proxy logic element based on an address map, let alone “routing, based on the destination address and proxy logic identifiers in an address map, the first message to a proxy logic element in the gateway that performs functions associated with the destination module based on data included in the first message,” as claimed. Indeed, while *Pruzan* mentions that computer 70 may emulate functions of a node, the reference is silent as to routing a message to a proxy logic element based on address map, as recited in claim 1.

The Examiner acknowledged that “the address map isn’t explicitly disclosed” in *Pruzan*. Office Action at p. 2. In rejecting the claims, the Examiner alleged that the address map subject matter of claim 1 “is inherent since the gateway knows what . . . [messages] go where.” *Id.* The Office Action has not established inherency for at least the following reasons.

As M.P.E.P. § 2112 makes clear:

To establish inherency, the extrinsic evidence ‘must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.’ (internal citations omitted).

In addition, M.P.E.P. § 2112 states:

[i]n relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art. (internal citations omitted).

In this case, the Office Action failed to provide sufficient evidence from *Pruzan*, or any recourse to extrinsic evidence, making clear that the “address map” features of Applicants’ claims are necessarily present in the reference. The Office Action also fails to present sufficient factual basis and technical reasoning to demonstrate inherency. As discussed in the interview, the various portions of *Pruzan* cited by the Examiner merely disclose that computer 70 “may be operable to emulate the functions of a node on bus 24,” with providing clear details of how such emulation is implemented. As discussed, *Pruzan*’s computer 70 could simply be configured to perform a function of another device, claim an address on the bus, and process messages received from the bus. *Pruzan* does disclose that node emulation involves routing messages to proxy logic based on an address map, let alone that such functionality is necessarily present. Consequently, as discussed in the interview, the Examiner cannot properly infer that the “address map” subject matter of Applicants’ claims is inherently disclosed by *Pruzan*.

For at least the foregoing reasons, *Pruzan* fails to disclose at least the “routing” feature of claim 1. Applicants remind the Examiner that a rejection under § 102 is proper only when the claimed subject matter is identically described or disclosed in the prior art. *In re Arkley*, 455 F.2d 586, 587, 172 USPQ 524, 526 (CCPA 1972). As noted above, “[t]he identical invention must be shown in as complete detail as is contained in the . . . claim.” M.P.E.P. § 2131. In this case, as discussed in the interview, *Pruzan* does not identically describe the subject matter of claim 1 “in as complete detail as is contained in the . . . claim.”

Because *Pruzan* fails to teach each and every feature of claim 1, the rejection of that claim under 35 U.S.C. § 102(e) should be withdrawn. The § 102(e) rejection of dependent claims 2-6 should be withdrawn as well, since claims 2-6 depend upon claim 1 and are likewise distinguishable from *Pruzan*. Applicants thus request withdrawal of the § 102(e) rejection and

the timely allowance of claims 1-6. In the interview, the Examiner indicated that he would reconsider the § 102(e) rejection in view of Applicants' response.

Independent claims 8, 10-12, 19, 28, and 29, although different in scope from claim 1 and from each other, recite subject matter similar to the "routing" feature of claim 1. In particular, claims 8 and 28 each recite, *inter alia*, "routing, based on information in an address map, the first message to a proxy logic element in the gateway that performs functions associated with the first destination module." Claims 10, 11, and 29 each recite, *inter alia*, "selectively providing, using an address map, the at least one message to program logic in the proxy control module [or in the gateway] that performs work machine control functions similar to the destination module that may be connected to the first data link to perform the same functions." Claims 12 and 19 each recite, *inter alia*, a gateway configured to route a message to proxy logic based on information in an address map. Claims 8, 10-12, 19, 28, and 29 are distinguishable from *Pruzan* for at least reasons similar to those presented above in connection with claim 1. Indeed, while *Pruzan* mentions that computer 70 may emulate functions of a node, the reference is silent as to routing or selectively providing a message to proxy logic based on address map, as claimed.

Each of claims 9, 13-18, and 20-25 depends upon one of claims 8, 12, and 19. Claims 9, 13-18, and 20-25 include all of the features of base claims 8, 12, and 19, respectively, and are likewise distinguishable from *Pruzan*. Applicants thus request withdrawal of the § 102(e) rejection and the timely allowance of claims 8-25, 28, and 29.

As to claim 27, *Pruzan* fails to disclose at least a gateway configured to "route the intercepted message, based on information in an address map, to proxy logic located in the gateway that performs functions associated with the master controller," where the master controller is remotely located with respect to the work machine, as claimed. Although *Pruzan*

discloses a protocol converter that allows a diagnostic system to interact with controllers on a vehicle bus, and that the protocol converter may emulate functions of nodes on the bus, the reference does not teach the above-noted subject matter recited in claim 27. While *Pruzan*'s protocol converter may (via computer 70) emulate functions of node, the reference does not disclose that the converter is configured to route a message to proxy logic based on address map, let alone "route the intercepted message, based on information in an address map, to proxy logic located in the gateway that performs functions associated with [a remotely located] . . . master controller," as claimed (emphasis added). Even if *Pruzan*'s protocol converter were consistent with a gateway and the diagnostic system were consistent with a master controller, *Pruzan* does not disclose that the protocol converter routes, based on an address map, a message to proxy logic in the converter that performs functions associated with the diagnostic system.

Because *Pruzan* fails to teach each and every feature of claim 27, the rejection of that claim under 35 U.S.C. § 102(e) should be withdrawn. Applicants thus request withdrawal of the § 102(e) rejection and the timely allowance of claim 27.

With regard to claim 32, *Pruzan* fails to teach at least "routing, based on an address map and the information included in the message, the message from the first program logic [in the gateway] to the second program logic [in the gateway]," where the first and second program logic serve as proxies for modules, as claimed. Although *Pruzan* discloses a protocol converter that allows a diagnostic system to interact with controllers on a vehicle bus, and that the protocol converter may emulate functions of nodes on the bus, the reference does not teach the above-noted subject matter recited in claim 32. Indeed, while *Pruzan*'s protocol converter 30 may be operable (via computer 70) to emulate node functions, the reference does not disclose routing a message from first proxy program logic in the protocol converter to second proxy program logic

in the protocol converter, let alone routing a message from first logic to second logic based on an address map and the information included in the message, as claimed. For at least these reasons, *Pruzan* fails to teach each and every feature of claim 32.

Independent claim 34, although of different scope than claim 32, recites subject matter similar to the “routing” feature of claim 32 noted above. In particular, claim 34 recites, *inter alia*, first program logic configured to “route, based on an address map and the information included in the message, the message from the first program logic to the second program logic.” Claim 34 is distinguishable from *Pruzan* for at least reasons similar to those presented above in connection with claim 32.

Because *Pruzan* fails to teach each and every feature of claim 32 or claim 34, the rejection of these claims under 35 U.S.C. § 102(e) should be withdrawn. The § 102(e) rejection of dependent claims 33 and 35 should be withdrawn as well, since claims 33 and 35 depend upon claims 32 and 34, respectively, and are likewise distinguishable from *Pruzan*. Applicants thus request withdrawal of the § 102(e) rejection and the timely allowance of claims 32-35.

Regarding claims 30 and 31

Applicants amend independent claim 30 to cure a minor informality. Applicants submit that claim 30 and its dependent claim 31 remain in condition for allowance.

New claims 36-38

New independent claim 36 recites a combination including:

receiving, at a first gateway located in a first work machine, a message addressed to a destination module located in a second work machine;

performing by the first gateway functions associated with the destination module, when the first gateway is able to process the message; and

routing the message from the first gateway to a second gateway located in the second work machine, when the first gateway is unable to process the message.

As discussed in the interview, *Pruzan* fails to teach or suggest each and every feature of new claim 36. Indeed, in the interview, the Examiner indicated that a claim including the above features would likely be allowed over the applied art. New claim 37 depends upon new claim 36 is likewise distinguishable from *Pruzan*. In addition, the applied art fails to teach or suggest the additional features recited in new claim 37. Applicants thus request the timely allowance of new claims 36 and 37.

New independent claim 38 recites a combination including “retrieving by the gateway a proxy logic element from a remote location” and “routing, based on the destination address identifier and an address map, the first message to a proxy logic element in the gateway that performs functions associated with the destination module.” As discussed in the interview, Applicants submit that new claim 38 is distinguishable from the applied art. Applicants therefore request the timely allowance of new claim 38.

Conclusion


Applicants request the Examiner's reconsideration of the application in view of the foregoing and the timely allowance of pending claims 1-6, 8-25, and 27-38.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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